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Patent Claims

1. Method for the conversion of a cytosine base in a nucleic acid to an uracil base comprising the steps of
  - 5        a) incubating a solution comprising the nucleic acid for a time period of 1.5 to 3.5 hours at a temperature between 70 and 90 °C, whereby the concentration of bisulfite in the solution is between 3 M and 6.25 M and whereby the pH value of the solution is between 5.0 and 6.0 whereby the nucleic acid is deaminated, and
  - 10      b) incubating the solution comprising the deaminated nucleic acid under alkaline conditions whereby the deaminated nucleic acid is desulfonated.
2. Method according to claim 1,
  - 15      characterized in that in step a) the temperature is between 75 and 85 °C.
3. Method according to any of the claims 1 to 2,
  - 20      characterized in that the concentration of bisulfite is between 3.2 M and 6 M.
4. Method according to any of the claims 1 to 3,
  - 25      characterized in that the pH value of the solution is between 5.25 and 5.75.
5. Method according to any of the claims 1 to 4,
  - 30      characterized in that the time period is between 1.75 and 3 hours.
6. Method according to any of the claims 1 to 5,
  - characterized in that the time period is between 2 and 3 hours.

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7. Method according to any of the claims 1 to 6,  
characterized in that  
in step a) the temperature is 80 °C, the concentration of bisulfite is 5 M, the  
pH value of the solution is 5.5 and the time period is between 2 and 3 hours.  
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8. Use of a solution with a pH value between 5.0 and 6.0 comprising bisulfite in  
a concentration between 3 M and 6.25 M at a reaction temperature between  
70 and 90 °C and optionally comprising hydroquinone in a reaction wherein  
a cytosine base in a nucleic acid is converted to an uracil base in the presence  
10 of bisulfite ions...
9. Use according to claim 8 wherein the pH value of the solution is between 5.25  
and 5.75 and wherein the concentration of bisulfite is between 3.2 M and 6  
M.  
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10. Use according to any of the claims 8 to 9 wherein the pH value of the solution  
is 5.5 and wherein the concentration of bisulfite is 5 M.
11. Kit comprising a solution with a pH value between 5.0 and 6.0 comprising  
20 bisulfite in a concentration between 3 M and 6.25 M and optionally  
comprising hydroquinone.
12. Solution with a pH value between 5.4 and 5.6 and comprising bisulfite in a  
concentration between 3.5 M and 6.25 M and optionally comprising  
25 hydroquinone.
13. Solution according to claim 12 wherein the concentration of bisulfite is  
between 3.75 M and 6 M.
- 30 14. Solution according to any of the claims 12 to 13 wherein the pH value of the  
solution is 5.5 and wherein the concentration of bisulfite is 5 M.